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CORNELL UNIVERSITY
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LABORATORY OF BACTERIOLOGY

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Dr. Joshua Lederberg
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Dear Josh:

Unfortunately your letter of June 20 did not reach me before I left for my fishing trip.

I do have some information about H-168 and xylose. You will remember that I did not have much luck isolating the heterozygotes from H-168 on EMS lactose. You suggested using either EMS mannitol or xylose. We had just a little bit of xylose so I did use both media and succeeded in isolating the heterozygotes cells on both media. Hence, at the time I received H-168 from you, it was heterozygous for Xyl. Of this I am absolutely positive. I subsequently used EMS mannitol to maintain the culture since we had no xylose and it is much more expensive. I am going to plate from your original slant on EMS xylose today, and will let you know if any Xyl+ colonies show up. I hope this will help you formulate what might have happened. I think your explanation of a new cross is a very probable one.

In regard to the "8"-217, my point was this: the only lethal occurring in its immediate family tree was its sib. Hence, if the segregation is associated with a lethal, it must have ended up in that particular sib. This is different from some of our earlier instances. Why? Was "8"-108 a uninucleate het. cell, while the earlier were multi-nuclear?

Now about H or W-206. I have been using EMS, lactose, and maltose in attempting to isolate the heterozygous cells. What with trips and all, I have not done too much with it, and I think I have some heterozygous strains established. However, it seems that many of the colonies picked from EMS are not heterozygous. What is the complete genotype of this culture? Is it also heterozygous for B, M, T, L, etc.?

I will let you know when I feel that I can handle H-215. I should be back from Oak Ridge about July 20 or so, but may have to go on active duty in the Navy for a couple of weeks in August. All in all it looks as though it is going to be a rather broken up summer for me, but I am anxious to continue this further so long as it appears profitable.

Very truly yours,


M. R. Zelle

MRZ-EBF